## **CLAIMS**

What is claimed is:

- 1. A system for uninterrupted and passive continuous 5 monitoring and measuring viewer behavior of a plurality of television viewers and pattern data among viewer events and tuning alternatives in a plurality of viewing premises to provide information for direct correlation with concurrent detailed data of programming and broadcasting in order to 10 analyze and ascertain the responses of the plurality of viewers to program and advertising content for the purpose of assessing the effectiveness of said programming and advertising content, wherein the results of said analysis can be made available to advertisers, said system comprising:
- a plurality of signal receiving devices located in a plurality of viewing premises, wherein each said signal receiving device further comprises:
  - a viewer event and tuning alternative decision device, for uninterrupted and passive continuous monitoring, categorizing and storing the television viewer behavior and pattern data among viewer events and tuning alternatives on the continuous basis;

an event timing device for recording a real-time record of event from/to time occurrence and for generating a

digital signal representative of event from/to time occurrence;

a data latching device for one of uninterrupted continuous latching and storing the digital signals for real
5 time timing data generated by said viewer event and tuning alternative decision device and said event timing device; and

a database for storing the data one of latched and stored by said data latching device.

- 10 2. The system of claim 1, which further comprises:
  - a control device for controlling said signal receiving device;
  - a television signal receiver for receiving television signals; and
- a device for one of: transmitting and relaying the received television signals to television.
  - 3. The system of claim 1, wherein said signal receiving device further comprises:
- a viewer input device for facilitating viewer control over said signal receiving device; and
  - an output device for providing an indication of signal receiving device operation.

- 4. The system of claim 1, which further comprises:
- a central processing computer which is located remotely from said signal receiving device, which further comprises:
- a control device for controlling the operation of said
  5 central processing computer;
  - a receiver for receiving data obtained at said signal receiving device;
  - a memory storage device for storing data obtained from said signal receiving device, and
- means for processing said data obtained from said plurality of signal receiving devices and for generating output data that is indicative of and reflects viewer behavior and pattern data among viewer events and tuning alternatives on the timing basis.

- 5. The system of claim 4, wherein said signal receiving device further comprises:
- a receiver for receiving signals from said central processing computer; and
- 20 a transmitter for transmitting data to said central processing computer.
  - 6. The system of claim 5, wherein said central processing computer further comprises:

a transmitter for transmitting one of control, data, and polling signals to said signal receiving device.

7. The system of claim 1, wherein television signals are transmitted via at least one of: a television communication system, a telephone communication system, a wireless communication system, a fiber optic communication system, and a broadband communication system that includes access to a computer network.

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- 8. The system of claim 1, wherein said viewer event and tuning alternative decision device comprises at least one of:
  - a television on/off unit;
  - a channel change unit;
  - a volume change unit;
    - a mute/unmute unit;
    - a data unit for selecting on-line activity; and
- one of: a viewer interactive and a viewer non-interactive event status data unit.

- 9. The system of claim 1, wherein said system further comprises:
- a remote control device for remotely transmitting control signals to said signal receiving device; and

- a remote control receiver for receiving said control signals at the signal receiving device.
- 10. The system of claim 4, further comprising:
- 5 a polling signal transmitter connected to said processing means;
  - a polling signal receiver connected to said processing means;

wherein said signal receiving device further comprises:

- a receiver for receiving non-television signals from said polling signal transmitter; and
  - a transmitter for transmitting non-television signals to said polling signal receiver.
- 15 11. The system of claim 1, wherein said database comprises time-stamped data representative of at least one of: on/off timing data of the signal receiving device, channel change data, volume change data, mute/unmute timing data, and interactive and non-interactive event status data and interactive and non-interactive operation data.
  - 12. A system for uninterrupted and passive continuous measuring viewer behavior of a plurality of television viewers and pattern data among viewer events and tuning alternatives

in a plurality of viewing premises on an uninterrupted continuous real-time basis to provide information for direct correlation with concurrent detailed data of programming and broadcasting in order to analyze and ascertain the responses of the plurality of viewers to program and advertising content for the purpose of assessing the effectiveness of said programming and advertising content, wherein the results of said analysis can be made available to advertisers, said system comprising:

a plurality of signal receiving devices located in a plurality of viewing premises for receiving television signals from a transmitter, wherein said plurality of signal receiving devices at least one of:

uninterruptedly and continuously categorizes and stores the television viewer behavior and pattern data among the viewer event and tuning alternatives on the uninterrupted continuous timing basis in exercising control over a respective signal receiving device; and

a central processing computer located remotely with 20 respect to each of said signal receiving devices for processing data obtained from said plurality of signal receiving devices to generate output data that is indicative of and reflects viewer behavior in direct correlation with concurrent detailed data of programming and broadcasting.

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13. The system of claim 12, wherein each one of said plurality of signal receiving devices comprises:

for categorizing and storing the television viewer behavior and pattern data among viewer events and tuning alternatives on the uninterrupted continuous timing basis, wherein said viewer event and tuning alternative decision device generates a digital signal representative of timing data of at least one of: on/off data of the signal receiving device, channel change data, volume change data, mute/unmute data, on-line activity data and a user for one of: interactive and non-interactive event status data and interactive and non-interactive operation data;

an event timing device for keeping a real-time record of event time occurrence and for generating a digital signal representative of event time occurrence;

a data latching device for one of latching and storing the digital signals generated by said viewer event and tuning alternative decision device and said event timing device; and

a database for storing the data one of latched and stored by said data latching device to provide information for direct correlation with concurrent detailed data of programming and broadcasting.

14. The system of claim 12, wherein each of said plurality of signal receiving devices further comprise:

a control device for controlling each of said plurality
5 of signal receiving devices;

a television signal receiver for receiving television signals; and

a device for one of transmitting and relaying the received television signals to a television.

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15. The system of claim 12, wherein said central processing computer further comprises:

a control device for controlling the operation of said central processing computer;

a receiver for receiving data from said plurality of signal receiving devices;

a memory storage device for storing data obtained from said plurality of signal receiving devices; and

means for processing said data obtained from said
plurality of signal receiving devices and for generating
output data that is one of: indicative of and reflecting
viewer behavior and pattern data among viewer events and
tuning alternatives on the uninterrupted continuous timing
basis.

- 16. The system of claim 12, wherein said central processing computer further comprises:
- a transmitter for transmitting one of: control, data and polling signals to said plurality of signal receiving devices.
  - 17. The system of claim 12, wherein television signals are transmitted via at least one of: a television communication system, a telephone communication system, a wireless communication system, a fiber optic communication system, and a broadband communication system that includes access to a computer network..
- 18. The system of claim 12, wherein at least one of said plurality of signal receiving devices comprises at least one of:
  - a television on/off from/to timing data unit;
  - a channel change data unit;
  - a volume change data unit;
- 20 a mute/unmute timing data unit;
  - a data unit for monitoring on-line activity and
  - one of: a viewer interactive and a viewer non-interactive event status data unit .

19. The system of claim 15, wherein said memory storage device comprises data regarding at least one of: viewer and demographic information.

5 20. A method for uninterrupted and passive continuous measuring viewer behavior of a plurality of television viewers and pattern data among viewer events and tuning alternatives obtained from a plurality of viewing premises to provide information for direct correlation with concurrent detailed data of programming and broadcasting in order to analyze and ascertain the responses of the plurality of viewers to program and advertising content for the purpose of assessing the effectiveness of said programming and advertising content, wherein the results of said analysis can be made available to advertisers, said method comprising the steps of:

obtaining viewer event/tuning alternative decisions from a plurality of viewing premises on a passive and uninterrupted continuous basis, and categorizing and storing the television viewer behavior and pattern data for viewer events and tuning alternatives on the passive and uninterrupted continuous basis comprising at least one of: on/off data of a signal receiving device, channel change data, volume change data, mute/unmute data, on-line activity data and a user for one of: interactive and non-interactive event

status data and interactive and non-interactive operation data;

generating a first digital signal representative of timing data of at least one of: on/off data of the signal receiving device, channel change data, volume change data, mute/unmute data, on-line activity data and a user for one of: interactive and non-interactive event status data and operation data;

generating a second digital signal representative of the

10 time of occurrence of said timing data of at least one of:

on/off data of the signal receiving device, channel change
data, volume change data, mute/unmute data, on-line activity
data and a user for one of: interactive and non-interactive
event status data and interactive and non-interactive

operation data;

time-stamping said first digital signal with said second digital signal to generate a third digital signal; and

storing said third digital signal to provide information for direct correlation with concurrent detailed data of programming and broadcasting.

21. The method of claim 20, further comprising a step of transmitting said third digital signal to a central processing

computer located remote with respect to where said third digital signal was generated.

- 22. The method of claim 20, further comprising steps of:
- 5 processing said third digital signal data; and

generating an output data set representative of measuring television viewer behavior and pattern data for viewer events and tuning alternatives on the passive and uninterrupted continuous basis in direct correlation with concurrent detailed data of programming and broadcasting.

- 23. The method of claim 20, further comprising steps of: obtaining third digital signal data for a plurality of viewers;
- processing said third digital signal data; and generating an output data set representative of measuring television viewer behavior and pattern data for viewer events and tuning alternatives on the passive and uninterrupted continuous basis in direct correlation with concurrent detailed data of programming and broadcasting.
  - 24. The method of claim 20, which further comprises a step of:

determining if a viewer is an authorized viewer.

25. The system of claim 1 wherein the tuning alternatives include channel selection, mute/unmute, volume increase/decrease, on-line access non-interactive options and interactive options.

- 26. The system of claim 1, wherein the analysis is performed across demographic and geographic groupings.
- 27. The system of claim 12, wherein the analysis is performed across demographic and geographic groupings.
  - 28. The method of claim 20, wherein the analysis is performed across demographic and geographic groupings.